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See application file for complete search history.

- (56)
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- (57) **ABSTRACT**

A spherical bi-stable mechanism includes a planar bi-stable compliant member including an input and an output, and a spherical mechanism member coupled to the output of the first planar bi-stable compliant component. An actuation of the first planar bi-stable compliant member in a first plane is configured to cause the spherical mechanism member to be selectively positioned in a second plane.

- 22 Claims, 11 Drawing Sheets**

- (52) **U.S. Cl.** **200/341**

